#### (19) World Intellectual Property Organization International Bureau



# 

#### (43) International Publication Date 23 June 2005 (23.06.2005)

### PCT

## (10) International Publication Number WO 2005/057722 A1

(51) International Patent Classification?: 9/04, 5/00, 19/00

H01Q 1/24,

(21) International Application Number:

PC17GB2004/005158

(22) International Filing Date:

10 December 2004 (10.12.2004)

(25) Filing Language:

0328811.5

English

(26) Publication Language:

English

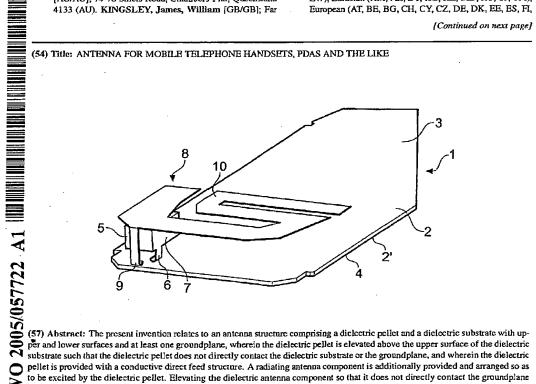
(30) Priority Data:

12 December 2003 (12.12.2003) GB

- (71) Applicant (for all designated States except US): ANTEN-OVA LIMITED [GB/GB]; Far Field House, Albert Road, Stow-cum-Quy, Cambridge CB5 9AR (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): IELLICI, Devis [FT/GB]; Far Field House, Albert Road, Stow-cum-Ouy, Cambridge CB5 9AR (GB). O'KEEFE, Steven, Gregory [AU/AU]; 74-78 Shiels Road, Chambers Flat, Queensland 4133 (AU). KINGSLEY, James, William [GB/GB]; Far

Field House, Albert Road, Stow-cum-Quy, Cambridge CB5 9AR (GB). KINGSLEY, Simon, Philip [GB/GB]; Far Field House, Albert Road., Stow-cum-Quy, Cambridge CB5 9AR (GB).

- (74) Agent: HARRISON GODDARD FOOTE; Belgrave Hall, Belgrave Street, Leeds LS2 8DD (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM. PG, PH, PL, PT, RO, RU, SC, SD, SF, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARTPO (BW, GH, GM, KB, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,



pellet is provided with a conductive direct feed structure. A radiating antenna component is additionally provided and arranged so as to be excited by the dielectric pellet. Elevating the dielectric antenna component so that it does not directly contact the groundplane or the dielectric substrate significantly improves bandwidth of the antenna as a whole.